

## SEARCH HISTORY

=&gt; d his ful

(FILE 'HOME' ENTERED AT 10:41:49 ON 04 OCT 2007)

FILE 'HCAPLUS' ENTERED AT 10:42:02 ON 04 OCT 2007

E BURKETT DOUGLAS D/AU

L1 21 SEA ABB=ON ("BURKETT DOUGLAS D"/AU OR "BURKETT DOUGLAS DEAN"/AU)

L2 1 SEA ABB=ON L1 AND ?EARLY?(W)?PREDICT?  
SELECT RN L2 1

FILE 'REGISTRY' ENTERED AT 10:42:35 ON 04 OCT 2007

L3 6 SEA ABB=ON (388078-25-9/BI OR 6131-90-4/BI OR 64-17-5/BI OR  
64-19-7/BI OR 7732-18-5/BI OR 92-31-9/BI)

FILE 'HCAPLUS' ENTERED AT 10:42:40 ON 04 OCT 2007

L4 1 SEA ABB=ON L2 AND L3

FILE 'REGISTRY' ENTERED AT 10:44:01 ON 04 OCT 2007

L5 1 SEA ABB=ON 92-31-9/RN

L6 STRUCTURE 92-31-9

L7 5 SEA SSS SAM L6

L8 95 SEA SSS FUL L6

FILE 'HCAPLUS' ENTERED AT 10:45:58 ON 04 OCT 2007

L9 819 SEA ABB=ON L5

L10 964 SEA ABB=ON L8

L11 964 SEA ABB=ON L9 OR L10

L12 145 SEA ABB=ON L10 NOT L9

L13 6 SEA ABB=ON L11 AND ?EPITHELIAL?(5A)(?CANCER? OR ?CARCIN? OR  
?TUMOR? OR ?TUMOUR? OR ?SARCOMA? OR ?NEOPLASM?)L14 6 SEA ABB=ON L9 AND ?EPITHELIAL?(5A)(?CANCER? OR ?CARCIN? OR  
?TUMOR? OR ?TUMOUR? OR ?SARCOMA? OR ?NEOPLASM?)

L15 6 SEA ABB=ON L13 OR L14

FILE 'USPATFULL' ENTERED AT 10:48:17 ON 04 OCT 2007

L16 11 SEA ABB=ON L13 OR L14

FILE 'HCAPLUS, USPATFULL' ENTERED AT 10:48:35 ON 04 OCT 2007

L17 16 DUP REMOV L15 L16 (1 DUPLICATE REMOVED)

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:48:43 ON 04 OCT 2007

L18 22 SEA ABB=ON L15

L19 17 DUP REMOV L18 (5 DUPLICATES REMOVED)

FILE HOME

FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is

strictly prohibited.

FILE COVERS 1907 - 4 Oct 2007 VOL 147 ISS 15  
FILE LAST UPDATED: 3 Oct 2007 (20071003/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9  
DICTIONARY FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

#### FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 2 Oct 2007 (20071002/PD)  
FILE LAST UPDATED: 2 Oct 2007 (20071002/ED)  
HIGHEST GRANTED PATENT NUMBER: US7278169  
HIGHEST APPLICATION PUBLICATION NUMBER: US2007226864  
CA INDEXING IS CURRENT THROUGH 2 Oct 2007 (20071002/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 2 Oct 2007 (20071002/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2007  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2007

#### FILE MEDLINE

FILE LAST UPDATED: 3 Oct 2007 (20071003/UP). FILE COVERS 1950 TO DATE.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE BIOSIS

FILE COVERS 1926 TO DATE.  
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 3 October 2007 (20071003/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

#### FILE EMBASE

10/758,936

FILE COVERS 1974 TO 3 Oct 2007 (20071003/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly..

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE JAPIO

FILE LAST UPDATED: 25 SEP 2007 <20070925/UP>

FILE COVERS APRIL 1973 TO JUNE 28, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

# Appendix A

L17 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1  
 ACCESSION NUMBER: 1995:305743 HCAPLUS Full-text  
 DOCUMENT NUMBER: 122:76033  
 TITLE: Biological stain composition, method of preparation and method of use for delineation of **epithelial cancer**  
 INVENTOR(S): Malmros, Mark K.; Tucci, Raymond J.; Cipriani, Pier J.  
 PATENT ASSIGNEE(S): CTM Associates, Inc., USA  
 SOURCE: U.S., 5 pp. Cont.-in-part of U.S. Ser. No. 785,520, abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5372801	A	19941213	US 1993-67506	19930607
CA 2097695	A1	19930501	CA 1992-2097695	19921007
CA 2097695	C	20000808		
AT 181510	T	19990715	AT 1992-921881	19921007
ES 2133143	T3	19990901	ES 1992-921881	19921007
IN 183288	A1	19991106	IN 1994-DE977	19940801

PRIORITY APPLN. INFO.: US 1991-785520 B2 19911031

AB A biol. stain composition contains toluidine blue O and a pharmaceutically acceptable oxidizing agent to convert any leuco toluidine blue O to the chromo form. A dry composition for preparing the stain includes the toluidine blue O, the oxidizing agent and an effervescent agent. These compns. are preferably buffered to improve shelf stability and clin. consistency. Compns. for intra-oral application contain a flavoring agent.

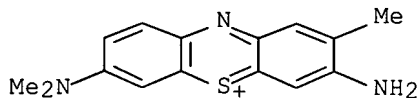
IT 92-31-9, Toluidine blue O

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

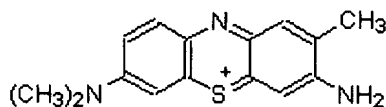
(toluidine blue O stain composition, method of preparation, and method of use for in situ delineation of **epithelial cancer**)

RN 92-31-9 HCAPLUS

CN Phenothiazin-5-ium, 3-amino-7-(dimethylamino)-2-methyl-, chloride (1:1)  
 (CA INDEX NAME)



● Cl<sup>-</sup>



Property	Data
Common name	Toluidine blue
Suggested name	Toluidine blue O
Other names	Tolonium chloride
C.I. number	52040
C.I. name	Basic blue 17
Class	Thiazin
Ionisation	Basic
Solubility aqueous	3.82%
Solubility ethanol	0.57%
Absorption maximum	620-622 (Conn) 632 (Gurr) 640.4 (Merck) 626 (Aldrich)
Colour	Blue
Empirical formula	C <sub>15</sub> H <sub>16</sub> N <sub>3</sub> SCl
Formula weight	305.8

**T**oluidine blue O is a metachromatic dye, and is frequently employed in that capacity. It is a blue nuclear counterstain, and can be used to demonstrate Nissl substance. It is useful for staining mast cell granules, both in metachromatic and orthochromatic techniques. Compare its formula to other methylene blue homologues.

## Reference

*R. D. Lillie.*

*Conn's Biological Stains*

Williams & Wilkins, Baltimore, MD., U.S.A.

*Aldrich chemical catalogue, 1992*

Aldrich Chemical Company, Milwaukee, WI, USA.

*Edward Gurr, (1971)*

*Synthetic dyes in biology, medicine and chemistry*

Academic Press, London, England.

*Susan Budavari, Editor, (1996)*